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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,835	01/22/2004	Paul David Ringgenberg	990122UID3CID2USA	5850

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EXAMINER

COLLINS, GIOVANNA M

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/762,835

Applicant(s)

RINGGENBERG ET AL.

Examiner

Giovanna M. Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 187-218, 220-221 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 187-206, 208-218, 220 and 221 is/are rejected.
- 7) ☒ Claim(s) 207 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20050303.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 187-189,192-194,200-202,206,208,209,211,216, and 220-221 are rejected under 35 U.S.C. 102(e) as being anticipated by Riggerberg et al. 5,799,733.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Riggerberg discloses (fig. 5) a formation test assembly positioned in a wellbore of the well, the formation test assembly including an internal chamber (at 304) divided into first (at 306) and second (302) portions by a fluid separation device (318) reciprocally and sealingly received in the chamber, the first chamber portion being in fluid communication with first (at 16) and second (above or below element 16) zones intersected by the wellbore, and the second chamber portion being in fluid communication with a remote location, the fluid separation device

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displaces in a first direction in the chamber when formation fluid is flowed in the first chamber portion from the first zone.

Referring to claim 188, Riggenberg discloses a sampler (at 308).

Referring to claim 189, Riggenberg the first chamber portion (at 306) has a greater volume than the sampler (308).

Referring to claim 192-94, Riggenberg discloses a fluid property sensor which an transmit information to a remote location or store it in the formation tester assembly (col. 16, lines 27-59).

Referring to claims 200-202, Riggenberg discloses the assembly is interconnected in a tubing string (299), a coiled tubular string or electrical conductor (col. 11, lines 45-54) .

Referring to claim 206, Riggenberg disclose a plug (318).

Referring to claim 208, Riggenberg discloses a packer (22).

Referring to claims 209 and 211, Riggenberg discloses a line to provide communication (col. 11, lines 45-54).

Referring to claim 216, Riggenberg discloses a pressure differential between the first zone (at 16) and the first chamber portion (at 306).

Referring to claims 220-221, Riggenberg discloses the flow separation device (318) in response to pressure applied at the remote location displaces in a second direction opposite the first direction.

3. Claims 187-189,201,206, and 220-221 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewandowski et al. 5,368,100.

Lewandowski discloses (fig. 2a) a formation test assembly positioned in a wellbore of the well, the formation test assembly including an internal chamber (at 80) divided into first (at 102) and second (at 100) portions by a fluid separation device (108) reciprocally and sealingly received in the chamber, the first chamber portion being in fluid communication with first and second (at 16 and 18) zones intersected by the wellbore, and the second chamber portion being in fluid communication with a remote location, the fluid separation device displaces in a first direction in the chamber when formation fluid is flowed in the first chamber portion from the first zone.

Referring to claim 188, Lewandowski discloses a sampler (col. 7, line 38-40).

Referring to claim 189, Lewandowski discloses the first chamber portion (at 102) has a volume greater than the sampler (at 238).

Referring to claim 201, Lewandowski discloses the formation assembly is interconnected in a coiled tubular string (30).

Referring to claim 206, Lewandowski disclose a plug (318).

Referring to claim 220-221, Lewandowski discloses the flow separation device (108) in response to pressure applied at the remote location displaces in a second direction opposite the first direction.

4. Claims 187, 199 and 203-205 are rejected under 35 U.S.C. 102(b) as being anticipated by Macgready 1,896,492.

Macgready discloses (fig. 13) a formation test assembly positioned in a wellbore of the well, the formation test assembly including an internal chamber (at 10) divided into first (at 16')

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and second (at 10) portions by a fluid separation device (30) reciprocably and sealingly received in the chamber, the first chamber portion being in fluid communication with first and second (at different areas about element B) zones intersected by the wellbore, and the second chamber portion being in fluid communication with a remote location, the fluid separation device displaces in a first direction in the chamber when formation fluid is flowed in the first chamber portion from the first zone.

Referring to claim 199, Macgready discloses the test assembly prevents the formation fluid from flowing to the earth's surface (when pressure at 33 prevents ball from moving) while the formation fluid flows through the test assembly.

Referring to claim 203, Macgready discloses (fig. 15) a formation test assembly positioned in a wellbore of the well, the formation test assembly including an internal chamber (at 10) divided into first (at 16') and second (at 10) portions by a fluid separation device (33) reciprocably and sealingly received in the chamber, the first chamber portion being in fluid communication with first and second (at different areas about element B) zones intersected by the wellbore, and the second chamber portion being in fluid communication with a remote location, inlet (at 28) and outlet opening (see fig. 14, at 13).

Referring to claim 204, Macgready discloses a first check valve (30).

Referring to claim 205, Macgready discloses a second check valve (at 14).

5.

6. Claims 187,200,206,208,214-218, and 220-221 are rejected under 35 U.S.C. 102(b) as being anticipated by Percy 3,152,639.

Pearcy discloses (fig. 1) a formation test assembly positioned in a wellbore of the well, the formation test assembly including an internal chamber (at 16) divided into first (at 16) and second (at 23) portions by a fluid separation device (17) reciprocally and sealingly received in the chamber, the first chamber portion being in fluid communication with first and second (at different areas about element 9) zones intersected by the wellbore, and the second chamber portion being in fluid communication with a remote location, the fluid separation device displaces in a first direction in the chamber when formation fluid is flowed in the first chamber portion from the first zone.

Referring to claim 200, Percy discloses the assembly in interconnected on a tubular string.

Referring to claim 206, Percy disclose a plug (17).

Referring to claim 208, Percy discloses a packer (14).

Referring to claims 212 and 214, Percy discloses a flow control device (11) that selectively permits and prevents flow therethrough.

Referring to claim 215, Percy disclose the flow control device (11) is a choke selectively regulating a rate of flow therethrough.

Referring to claim 216, Percy discloses differential pressure exists between the first zone (at 9) and the first chamber portion (at 16).

Referring to claims 217-218, Percy discloses a formation test assembly positioned in a wellbore of the well, the formation test assembly including an internal chamber (at 16) divided into first and second portions by a fluid separation device (17) reciprocally and sealingly received in the chamber, the first chamber portion being in selective fluid communication with

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first and second zones (at 9) intersected by the wellbore, the second chamber portion being in fluid communication with a remote location, a pressure differential existing from the first zone (at 9) to the first chamber portion (at 16), the pressure differential inducing the formation fluid to flow from the first zone into the first chamber portion, and pressure applied through a tubular string (at 10) to the second chamber portion (at 23) inducing the formation fluid to flow from the first chamber portion into the second zone (through element 11).

Referring to claim 220-221, Percy discloses the flow separation device (17) in response to pressure applied at the remote location displaces in a second direction opposite the first direction.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 190-191 are rejected under 35 U.S.C. 103(a) as being unpatentable over Percy '639 in view of Vaynshteyn 6,173,772.

Referring to claims 190-191, Percy discloses the assembly of claim 187 but does not disclose a perforating gun. Vaynshteyn teaches (fig. 3a) perforating guns (57,82) for perforating first and second zones (32,33). As it would be advantageous to have a perforating gun in order to access the formation if the well is cased, it would be obvious to one of ordinary skill in the art at

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the time of the invention to modify the system disclosed by Percy to have perforating guns as taught by Vaynshteyn.

9. Claims 192-198 ,202,209-211 and 213 are rejected under 35 U.S.C. 103(a) as being unpatentable over Percy '639 in view of Blake 4,573,532.

Referring to claim 192 and 197-198,Percy discloses the assembly of claim 187 but does not disclose a fluid property sensor. Blake teaches a sampler with a fluid property sensor (col. 2, lines 5-10). As it would be advantageous to verify that the well contains fluids that are economically viable for long term production, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the system disclosed by Percy to have fluid property sensor as taught by Blake.

Referring to claims 193-194, Blake (fig. 1) teaches the sensor information is transmitted (at 14) to the surface or stored (at 16) in test assembly .

Referring to claim 195, Blake teaches the sensors are between a tester valve (at 120) and a circulating valve (at 82).

Referring to claims 202, 209 and 211, Percy discloses the assembly of claim 187 but does not disclose the assembly is connected to an electrical conductor in the well bore. Blake teaches a test assembly connected to an electrical conductor (at 14) in the well bore. Blake teaches this feature allows operator to monitor the device from the surface (col. 4, lines 55-57). As it would be advantageous to monitor the operation of the device from the surface, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the system

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disclosed by Percy to have the assembly is connected to an electrical conductor in the well bore as taught by Blake.

Referring to claim 210, Percy, as modified, does not disclose the line is a fiber optic line. However, fiber optic lines are well known wirelines. As it one of ordinary skill in the art would be familiar with the use of a fiber optic line as a wireline, it would be obvious one of ordinary skill in the art to further modify the system disclosed by Percy to use a fiber optic line.

Referring to claim 213, Percy does not disclose the flow control member is electrically operated. Blake teaches tool that electrically operated can be controlled from the surface 9col. 4, liens 55-58). As it would be advantageous to control the flow control member from the surface, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the system disclosed by Percy to have the flow control member is electrically operated as taught by Blake.

Allowable Subject Matter

10. Claim 207 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments with respect to claims 187-206,208-218,220-221 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 703-306-5707. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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